

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

Claim 1 (Currently Amended): A connective tissue distraction device comprising:

first transmitting means for transmitting force to a first tissue region, and including a first flange engagement structure;

second transmitting means for transmitting force to a second tissue region, and including a second flange engagement structure; and

expansion means including a first flange that engages ~~for engaging~~ the first flange engagement structure of the first transmitting means, and further including a second flange that engages the second flange engagement structure of ~~and~~ the second transmitting means, the expansion means for exerting force distracting the first transmitting means from the second transmitting means to create a distraction space for formation of distracted connective tissue,

wherein the first flange disengages from the first flange engagement structure and the second flange disengages from the second flange engagement structure ~~and for disengaging from the first transmitting means and the second transmitting means~~ after the distraction is complete ~~and before the period of bone consolidation.~~

wherein at least one of the first transmitting means, the second transmitting means and the expansion means comprises a biodegradable, bioerodible or bioresorbable material.

Claim 2 (Previously Presented): The connective tissue distraction device of claim 1, wherein the first transmitting means comprises a structure for attachment to bone.

Claim 3 (Previously Presented): The connective tissue distraction device of claim 2, wherein the structure for attachment to bone comprises at least in part a biodegradable, bioerodible or bioresorbable material.

Claim 4 (Previously Presented): The connective tissue distraction device of claim 2, wherein the structure for attachment to bone is a plate.

Claim 5 (Previously Presented): The connective tissue distraction device of claim 2, wherein the structure for attachment to bone is attached to bone via at least one screw.

Claim 6 (Previously Presented): The connective tissue distraction device of claim 5, wherein the screw is at least in part biodegradable, bioerodible or bioresorbable material.

Claim 7 (Original): The connective tissue distraction device of claim 1, wherein the second transmitting means comprises a structure for attachment to bone.

Claim 8 (Previously Presented): The connective tissue distraction device of claim 7, wherein the structure for attachment to bone is at least in part a biodegradable, bioerodible or bioresorbable material.

Claim 9 (Original): The connective tissue distraction device of claim 7, wherein the structure for attachment to bone is a plate.

Claim 10 (Previously Presented): The connective tissue distraction device of claim 7, wherein the structure for attachment to bone is attached to bone via at least one screw.

Claim 11 (Previously Presented): The connective tissue distraction device of claim 10, wherein the screw is at least in part a biodegradable, bioerodible or bioresorbable material.

Claim 12 (Original): The connective tissue distraction device of claim 1, wherein at least one of the first transmitting means, second transmitting means or the expansion means comprise a malleable or heat malleable material.

Claim 13 (Previously Presented): The connective tissue distraction device of claim 1, wherein the first tissue region comprises connective tissue.

Claim 14 (Previously Presented): The connective tissue distraction device of claim 1, wherein the first tissue region comprises bone.

Claim 15 (Previously Presented): The connective tissue distraction device of claim 1, wherein the second tissue region comprises connective tissue.

Claim 16 (Previously Presented): The connective tissue distraction device of claim 1, wherein the second tissue region comprises bone.

Claim 17 (Original): The connective tissue distraction device of claim 1, wherein the expansion means comprises a screw actuated expansion mechanism.

Claim 18 (Previously Presented): The connective tissue distraction device of claim 1, wherein the expansion means comprises at least in part a biodegradable, bioerodible or bioresorbable material.

Claim 19 (Original): The connective tissue distraction device of claim 1, further comprising an activation means.

Claim 20 (Previously Presented): The connective tissue distraction device of claim 19, wherein the activation means is directly or indirectly engaged with expansion means.

Claim 21 (Previously Presented): The connective tissue distraction device of claim 20, wherein the activation means is reversibly engaged with the expansion means.

Claim 22 (Canceled).

Claim 23 (Canceled).

Claim 24 (Previously Presented): The connective tissue distraction device of claim 19, wherein at least a portion of the activation means is external to the subject.

Claim 25 (Currently Amended): A method of distracting a first tissue region and a second tissue region, comprising:

implanting a first transmitting means having a first slot onto the first tissue region;

implanting a second transmitting means having a second slot onto the second tissue region;

engaging a first flange of an expansion means with the first slot of the first transmitting means;

engaging a second flange of the expansion means with the second slot of the ~~and~~ second transmitting means;

activating the expansion means to exert a force distracting the first transmitting means from the second transmitting means to create a distraction space for formation of distracted tissue; and

disengaging the expansion means from the first transmitting means and the second transmitting means after the distraction is complete ~~and before the period of bone consolidation.~~

Claim 26 (Previously Presented): The method of claim 25, further comprising separating the first and second tissue regions before implanting of the first and second transmitting means.

Claim 27 (Previously Presented): The method of claim 26, further including separating the first and second tissue regions via an osteotomy before implanting of the first and second transmitting means.

Claim 28 (Previously Presented): The method of claim 27, further including separating the first and second tissue regions via an osteotomy on tissue intermediate the first and second tissue regions.

Claim 29-41 (Canceled).

Claim 42 (Currently Amended): A connective tissue distraction device comprising:

- a first transmitting structure that transmits force to a first tissue region;
- a second transmitting structure that transmits force to a second tissue region; and
- an expansion structure ~~that is not integral with the first and second transmitting structure and that engages the first transmitting structure and the second transmitting structure, exerts a force that distracts the first transmitting structure from the second transmitting structure to create a distraction space for formation of distracted connective tissue, the expansion structure further comprising:~~
 - a proximal end having a first flange that engages a first slot of the first transmitting structure; and
 - a distal end having a second flange that engages a second slot of the second transmitting structure;

~~and disengages from the first transmitting structure and the second transmitting structure after the distraction is complete and before the period of bone consolidation.~~

wherein at least one of the first transmitting structure, the second transmitting structure and the expansion structure comprises a biodegradable, bioerodible or bioresorbable material.

Claim 43 (Previously Presented): The device of claim 42, wherein the first and second transmitting structures each comprise one of a plate, a stent, a mesh or an implant.

Claim 44 (Previously Presented): The device of claim 42, further including attachment structures that attach the first and second transmitting structures to the first and second tissues regions, respectively.

Claim 45 (Previously Presented): The device of claim 44, wherein the attachment structures comprise one of screws, staples, tacks, pins, or nails.

Claim 46 (Previously Presented): The device of claim 44, wherein the attachment structures comprise a biodegradable, bioerodible or bioresorbable material.

Claim 47 (Previously Presented): The device of claim 44, wherein the first and second tissue regions each comprise one of bone or connective tissue.

Claim 48 (New): The connective tissue distraction device of claim 1, the first flange engagement structure having a first slot that engages the first flange of the expansion means and the second flange engagement means having a second slot that engages the second flange of the expansion means.